

AMENDMENTS TO THE CLAIMS

1. (Previously presented) An isolated peptide with an amino acid sequence consisting of 8-100 amino acids,
wherein the peptide binds to human VEGFR-3, and
wherein the amino acid sequence includes eight amino acids satisfying the formula:
 $X_1X_2X_3X_4X_5X_6X_7X_8$ (SEQ ID NO: 32), wherein X_1 through X_8 are amino acid residues,
wherein

the amino acid residue at X_1 is a glycine residue or a conservative substitution thereof;

the amino acid residue at X_2 is a tyrosine residue or a conservative substitution thereof;

the amino acid residue at X_3 is a tryptophan residue or a conservative substitution thereof;

the amino acid residue at X_4 is a leucine residue or a conservative substitution thereof;

the amino acid residue at X_5 is a threonine residue or a conservative substitution thereof;

the amino acid residue at X_6 is an isoleucine residue or a conservative substitution thereof;

the amino acid residue at X_7 is a tryptophan residue or a conservative substitution thereof; and

the amino acid residue at X_8 is a glycine residue or a conservative substitution thereof,
and wherein the peptide comprises no more than 3 conservative amino acid substitutions introduced at positions X_1 - X_8 .

2. (Previously presented) The isolated peptide according to claim 1, further comprising amino- and carboxy-terminal cysteine residues.

3. (Previously presented) The isolated peptide according to claim 1, wherein the amino acid sequence satisfies the formula: CX₁X₂X₃X₄X₅X₆X₇X₈C (SEQ ID NO: 33).

4. (Previously presented) The isolated peptide according to claim 1, wherein:
the conservative substitution at position X₁ is selected from the group consisting of isoleucine, valine, leucine, alanine, proline, and norleucine;
wherein the conservative substitution at position X₂ is selected from the group consisting of serine, threonine, phenylalanine, and tryptophan;
wherein the conservative substitution at position X₃ is selected from the group consisting of phenylalanine and tyrosine;
wherein the conservative substitution at position X₄ is selected from the group consisting of isoleucine, valine, alanine, glycine, phenylalanine, proline, norleucine and methionine;
wherein the conservative substitution at position X₅ is selected from the group consisting of asparagine, glutamine, and serine;
wherein the conservative substitution at position X₆ is selected from the group consisting of valine, leucine, alanine, glycine, phenylalanine, proline, norleucine or methionine;
wherein the conservative substitution at position X₇ is selected from the group consisting of phenylalanine and tyrosine; and
wherein the conservative substitution at position X₈ is selected from the group consisting of isoleucine, valine, leucine, alanine, proline, and norleucine.

5.-11. (Cancelled)

12. (Previously presented) The isolated peptide according to claim 1, comprising the sequence Y₁GYWLTIWGY₂ (SEQ ID NO: 34), wherein Y₁ and Y₂ are amino acids.

13. (Original) The isolated peptide of claim 1, wherein said peptide comprises the sequence CGYWLTIWGC (SEQ ID NO: 35).

14.-20. (Cancelled)

21. (Previously presented) An isolated peptide with an amino acid sequence consisting of 7-100 amino acids

wherein the amino acid sequence includes amino acids satisfying the formula GYW₁X₂X₃W (SEQ ID NO: 67), wherein X₁, X₂, and X₃ comprise amino acids, and wherein the peptide binds human VEGFR-3.

22. (Previously presented) The isolated peptide according to claim 21, wherein the amino acid sequence satisfies the formula GYW₁X₂X₃WX₄ (SEQ ID NO: 68), wherein X₄ comprises an amino acid.

23. (Previously presented) The isolated peptide according to claim 21 or 22, further comprising amino- and carboxy-terminal cysteine residues.

24. (Previously presented) An isolated peptide according to claim 1 or 21, wherein said peptide further comprises an intramolecular bond between amino acid residues to form a cyclic peptide.

25. (Previously presented) The isolated peptide according to claim 24, wherein the peptide comprises amino- and carboxy-terminal cysteines, and the intramolecular bond comprises a disulfide bond between the cysteines.

26. (Previously presented) The isolated peptide according to claim 1 or 21, wherein said peptide inhibits Vascular Endothelial Growth Factor C (VEGF-C) binding to the human VEGFR-3.

27. (Previously presented) The isolated peptide according to claim 1 or 21, further comprising a cytotoxic agent, or a label attached to the peptide.

28. (Previously presented) The peptide according to claim 27, wherein the cytotoxic agent comprises a radioisotope.

29. (Previously presented) The peptide according to claim 27, wherein the cytotoxic agent comprises an anti-neoplastic pro-drug.

30. (Previously presented) A chimeric protein comprising a therapeutic protein amino acid sequence attached to the amino acid sequence of a peptide according to claim 1 or 21.

31. (Previously presented) The chimeric protein according to claim 30, wherein the therapeutic protein comprises a tumor necrosis factor.

32. (Previously presented) The peptide according to claim 1 or 21 attached to an antibody or fragment thereof.

33. (Previously presented) The isolated peptide of claim 1 or 21, wherein said peptide further comprises a modification to increase the circulating *in-vivo* half-life of the peptide in a mammal.

34. (Cancelled)

35. (Previously presented) A peptide dimer comprising first and second peptides according to claim 1 or 21.

36. (Currently amended) The peptide dimer according to claim 35, wherein the first and second monomers-peptides comprise the same peptide.

37. (Cancelled)

38. (Previously presented) A composition comprising an isolated peptide according to claim 1 or 21 in a pharmaceutically acceptable carrier.

39.-74. (Cancelled)

75. (Previously presented) The peptide of claim 27 wherein the label is selected from the group consisting of a radionuclide, a dye, an enzyme, and an enzyme substrate.

76. (Previously presented) The peptide of claim 1 or 21 with an amino acid sequence consisting of 8-25 amino acids.

77. (New) The peptide of claim 12 or claim 13 with an amino acid sequence consisting of 10-25 amino acids.